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11. BLACK-SHOULDERED KITE *ELANUS CAERULEUS VOCIFERUS* (LATHAM) PREYING ON WOOD SANDPIPER *TRINGA GLAREOLA* LINNAEUS

During our studies on wetland birds of Kole area in Thrissur district, we observed a blackshouldered kite Elanus caeruleus vociferus (Latham) capturing a wood sandpiper Tringa glareola Linn. from a paddy field on January 6, 2000. After capturing the prey the kite landed on a nearby bund. The sandpiper was alive and the kite tried to kill it. Observing through a telescope (20x) we saw the kite removing the feathers from the wings and feeding on the flesh and bones. It took 35 minutes to completely consume the prey. The wood sandpiper was caught from a flock of birds numbering around 50. The Kole wetland covering an area of 11,000 ha is spread over Thrissur and Mallapuram districts. The area lies between 10° 20'-10° 40' N, and 75° 58'-76° 11' E.

Lamba (1970) had reported black-shouldered kite catching a wounded green pigeon (yellow-legged green-pigeon) *Treron phoenicoptera* in flight. According to Ali and Ripley (1983), locust, grasshopper, crickets, other insects, lizards, field rats, mice, young and sickly birds are the recorded food items of the black-shouldered kite. Its feeding on migratory species like the wood sandpiper is not reported so far and this is an addition to its list of prey.

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vociferus (Latham) taking in flight a wounded green pigeon *Treron phoenicoptera* (Latham). *J. Bombay nat. Hist. Soc.* 66(3): 622.

12. LEAF-PRESENTING AS POSSIBLE COURTSHIP BEHAVIOUR BY PIED FALCONETS *MICROHIERAX MELANOLEUCOS*

Pied falconets *Microhierax melanoleucos* (Blyth) are distributed from the foothills of the eastern Himalaya through southern China, Laos and northern Vietnam. Despite this wide range, rather little is documented about their breeding behaviour, and Grimmett *et al.* (1998) comment that the juvenile remains undescribed. We present here incidental observations of behaviour apparently connected with breeding, made during

a trip to Northeast India in 1998 (Hornbuckle et al. 1998).

A small group of at least four pied falconets *Microhierax melanoleucos* was observed on the top of a tall, open tree near the Deban HQ of Namdapha National Park, Arunachal Pradesh, on February 24, 1998 at c. 0800 hrs. JH observed one with a large leaf in its bill, which it proceeded to offer to a neighbouring bird. This bird accepted

the leaf in its bill, but soon dropped it and neither bird made any attempt to retrieve it. The other birds, perched a little further away, soon flew off, as did the presenting bird a few minutes later. Shortly after, DA also saw this behaviour reenacted on some dead, bare branches in the canopy of probably the same tree. At least one falconet was seen flying with a large leaf (c. 15 cm long) held in its feet, before alighting on a bare branch. It transferred the leaf to its bill and presented it to another bird, which then dropped the leaf almost immediately.

Three weeks later, on March 12, in the Kolomi area of Dibru-Saikhowa Wildlife Sanctuary, Assam, DA saw two pied falconets land on the top of a dead tree and again witnessed this unusual behaviour.

Presenting of food items as a courtship ritual is well known among raptors (Cade 1982); moreover, leaves are used by several species as nest material. However, the presenting of leaves seems to be very unusual.

The first record of this kind of behaviour is by Naoroji (1997) who observed the courtship behaviour of collared falconets *Microhierax* caerulescens on April 16, 1993. He commented that, prior to mating, there would be an extended courtship ritual in which the female would usually remain perched on a bare branch while the male would fly off. Prior to returning, the male would often pluck a dried sal leaf with his feet and deposit it in the nest hole, sometimes perching alongside the female with the leaf before depositing it in the nest.

Pied falconets are recorded as breeding in old barbet and woodpecker holes from March to May (Delacour and Jabouille 1931, Ali and Ripley 1987). Caldwell and Caldwell (1931) remark that (in China) the eggs are laid 'upon a bed of leaves and bits of grasses in a cavity of a tree.' However, Baker (1935) while noting that their nesting behaviour was poorly known, recorded only beetle elytra and other insect remains as nest lining. Etchecopar and Hue

(1978-83) also refer to the nest being of insect remains, while Delacour and Jabouille (1931) state that the eggs always lie on a bed of insect debris, beetle elytra and butterfly wings. Neither they nor La Touche (1931) or Baker mention any leaves being present in nests of pied falconet, though Baker comments on leaves in the nest holes of the collared falconet. This is puzzling, since the behaviour we observed would seem to be stereotyped.

At 0923 hrs on March 15, in Panbari Forest near Kaziranga National Park, PIH observed two pied falconets perched together about 20 m up a tree on a dead snag. The pair was about 20 cm apart, with the female facing away from the male. He was bobbing from an exaggerated vertical position to the horizontal about once per second, and calling frantically. This was a fairly loud, very excited, rapid-fire sequence of slightly hoarse, chattering notes - 'jiff jiff jiff jiff jiff....' which gradually slowed, and reminded PIH of the foodbegging calls of fledglings of several other raptor species. This behaviour continued for a few seconds, after which copulation occurred, with the male continuing to call for about 20 seconds afterwards. The pair then flew off. This was a rather brief observation by PIH, and neither leafpresenting nor clumping and allopreening, (thought by Naoroji to help maintain the pair bond of collared falconets), were seen.

Closely perched collared falconets were noted by Sparks (1965) to often face away from each other in captivity, probably to prevent agonistic responses.

Our observations are presumably earlier in the breeding cycle than those witnessed by Naoroji, but suggest that pied falconets may show some similarities in courtship and mating behaviour to collared falconets. The offering of leaves, presumably by the male, may be a first stage in initiating interest in mating and nesting behaviour in the female.

Kemp and van Zyl (1998) recorded collared falconets breeding cooperatively. Etchecopar and

Hue (1978-83) note that pied falconets can be seen in groups of 5 or 6, and this together with our observation of a group at Deban in February suggests that pied falconets may also sometimes breed cooperatively. Clearly this species, regarded as 'Vulnerable' by BirdLife International (Collar et al. 1994), requires considerable further study.

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13. UNUSUAL ASSOCIATION BETWEEN A PAIR OF SARUS CRANES GRUS ANTIGONE AND SIBERIAN CRANE GRUS LEUCOGERANUS AT KEOLADEO NATIONAL PARK, BHARATPUR

A strong bond was observed between a pair of sarus cranes *Grus antigone* Linn. and a female Siberian crane *Grus leucogeranus* Pallas during 1997-98. It was first observed in September 1997, a few days after the two captive bred Siberian cranes left the Park and one died. Four captive bred Siberian cranes had been released in the Park during February 1997, as part of an International effort to augment the dwindling population of Siberian cranes.

The lone female Siberian crane, Baharami, foraged in block F in the northeast region of the Park and a pair of sarus was regularly seen in the same block. Baharami gradually started

agonistic reaction from them, and by the second week of September she had also started roosting with them. They would roost just a few feet away from each other. The cranes vocalised, displayed, foraged and roosted together as a close-knit flock by early October. The sarus cranes would threat-display if their conspecifics attacked Baharami and would chase them away. They would even attack the wild Siberians if they tried chasing Baharami. An approaching dog or man would elicit loud unison calls and the two sarus cranes would alert each other. Most of the time, at least one of the three cranes would look around while